

## **REMARKS**

Applicant submits that claims 1-5, 8, 9, 11-14, 16-21, 23 and 26-33 are pending in this application. In the Office Action mailed May 11, 2007, the Examiner rejected claims 1-5, 11-14, 16-21, 23, and 26-32; the Examiner also objected to claims 8, 9 and 33. In this Response to Office Action, Applicant has amended claims 1, 8, 9, 16, 23, and 31-33 and has added new claims 34-37. Reconsideration of the currently pending and newly added claims based on the preceding amendments and the following remarks is respectfully requested. For ease of reference, the Examiner's comments from the Office Action are reprinted below in 10-point bold type and are followed by the Applicant's remarks.

### **Claim Rejections – 35 USC § 103**

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action;

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope of contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 3-5, 11, 14, 16, 18, 19, 23, 26, 27, 29, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt (US 1,889,592) in view of Kelley (US 2,340,597).

With regard to claims 1, 4, 5, 16, 23, 26, and 27, Brandt discloses a slip puller apparatus, having a slip base (2), a pulling mechanism (25 and 27), or connecting means, pivotally attached to the slip base, wherein the pulling mechanism has top and bottom arms exhibiting a parallelogram geometry. Brandt further teaches slips (32), or gripping means,

connected to the pulling mechanism, and a lever (22), or manipulating means, connected to the pulling mechanism and adapted to move the pulling mechanism between an activated and deactivated position. No part of the pulling mechanism/connecting means and no part of the lever/manipulating means ever extends outside of the boundary of the slip base.

Brandt fails to disclose the slip base being mounted on a rotary table. Brandt also discloses a lever rather than a pneumatic or hydraulic cylinder for the manipulating means.

Kelley discloses a slip puller apparatus having a slip base (2) mounted on a rotary table (4). The slip base of Kelley is within the boundary of the rotary table. Furthermore, Kelley's slip puller apparatus is shown being operated by a handle or lever (43). However, Kelley teaches that the lever, "employed for the manual operation of the lifting mechanism, may be replaced by other suitable and conventional pneumatic or mechanical lever devices of a character well understood in the art" (page 2, column 2, lines 70-74).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have mounted the slip puller apparatus of Brandt on a rotary table, as such a configuration was well known in the art, as evidenced by Kelley. Furthermore, if the slip puller of Brandt was mounted on a rotary table via the slip base as taught by Kelley, then the slip base, pulling mechanism, and cylinder would have all been within the boundary of the rotary table.

It also would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have replaced the lever of Brandt with a hydraulic or pneumatic cylinder, as Kelley teaches the functional equivalence of levers and cylinders, and the advantages of automatic actuation of well devices as opposed to manual actuation were notoriously well known in the art.

With regard to claims 3 and 18, neither Brandt nor Kelley discloses connecting the slip base to the rotary table with magnets. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Brandt in view of Kelley so that the slip base would have been connected to the rotary table with magnets, since the examiner takes Official Notice of the equivalence of bolts and magnets for their being used to connect elements of a slip device to the rotary table. The selection of any of these known equivalents to connect the slip base to the rotary table would have been within the level or ordinary skill in the art. Further, it would have been an obvious matter of design choice to use magnets to connect the slip base to the rotary table, since applicant has not disclosed that using magnets solves any stated problem or is for any particular purpose and it appears that the invention would have functioned equally well with bolts or magnets.

With regard to claims 11, 19, and 29, the top and bottom arms of Brandt exhibit a parallelogram geometry in the activated and deactivated positions.

With regard to claims 14 and 30, no portion of the slip puller apparatus of Brandt in view of Kelley is outside of the boundary of the rotary table in the activated or deactivated position.

With regard to claim 31, Brandt discloses a spring (44) connected to the pulling mechanism and operable to move the pulling mechanism between an activated and deactivated position.

With regard to claim 32, Brandt discloses a pull arm (22) connected to the top and bottom arms.

4. Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of Kelley as applied to claim 1 above, and further in view of Baugh (US 4,269,277).

With regard to claims 2 and 17, Brandt in view of Kelley discloses all the limitations of the above claims, except for the slip base being attached to the rotary table via kelly bushing receptacles.

Baugh discloses a power slip assembly. Baugh further teaches a "base collar...equipped with throughbores by which the entire power slip assembly may be bolted to, for example, the framework of a fluid pressure drive assembly of a snubbing device, to a well workover rig, or to some other support means" (column 11, line 49). It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have bolted the slip bowl of Brandt in view of Kelley to the rotary table using the throughbores (or kelly bushing receptacles) of Baugh, in order to have formed a strong, releasable connection between the slip bowl and the rotary table.

5. Claims 13, 21, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of Kelley as applied to claims 1, 16, and 23 above, and further in view of Moore (US 2,545,627).

Brandt in view of Kelley teaches the operation of the slip puller apparatus via hydraulic or pneumatic cylinder, but fails to explicitly disclose the slip puller being operated via remote control.

Moore discloses a hydraulically actuated slip lifter apparatus in which the hydraulic lines that control the lifting mechanism are routed to a control valve located at a remote point, "close to where the driller will stand" (column 3, lines 69-72).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the device of Brandt in view of Kelley in order to have enable remote operation as taught by Moore, so that operator safety would have improved.

6. Claims 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of Kelley as applied to claims 1 and 155 above, and further in view of Broussard (US 4,450,606).

Brandt in view of Kelley fails to disclose the encasing of the pulling mechanism within a protective sheath.

Broussard discloses a slip elevator device. Broussard further teaches the use of a "protective housing," which encases the "working mechanism" (the pulling mechanism) of Broussard's invention (column 7, line 27).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have included the protective sheath of Broussard with the pulling mechanism of Brandt in view of Kelley, in order to have "discourage[d] the entry of dust, drilling mud or other abrasive material to the working mechanism" (Broussard, column 7, line 29).

Applicant respectfully asserts that based on the amendments above and the remarks below, the Examiner's rejections have been rendered moot.

### Allowable Subject Matter

7. Claims 8, 9, and 33 are objected to as being dependent upon a rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant appreciates the Examiner's finding that claims 8, 9, and 33 would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims. Applicant has accordingly amended claims 1, 8, 9, 16, 23, and 31-33 and has added new claims 34-37 to effectively rewrite claim 8 in independent form.<sup>1</sup>

Specifically, independent claims 1 and 31 have been amended to include the additional limitation from dependent claim 8 that "the pulling mechanism [or connecting means] further compris[es] a pull arm connected to the at least one bottom arm and the top arm." Dependent claims 8, 9, 32, and 33 have been amended to separately claim the "pull arm extension connected to the pull arm" and the "an accommodating link connected to the pull arm extension" limitations.

Similarly, as with independent claims 1 and 31, independent claims 16 and 23 have been amended to include the "pull arm" limitation from dependent claim 8. Likewise, new claims 34-37 have been added to include the "pull arm extension connected to the pull arm" and the "an accommodating link connected to the pull arm extension" limitations depending from independent claims 16 and 23.

Accordingly, as Applicant has effectively rewritten claim 8 in independent form, and has added the pertinent limitation to the remaining independent claims, Applicant respectfully asserts that the Examiner's objection has been overcome, and that pending claims 1-5, 8, 9, 11-14, 16-21, 23 and 26-33 and new claims 34-37 are all in condition for allowance.

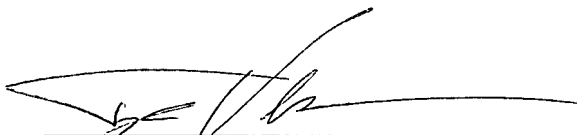
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<sup>1</sup> As dependent claim 32 requires the same "pull arm" limitation as dependent claim 8, it is presumed that the Examiner also intended to identify claim 32 as a claim that would be allowable if rewritten in independent form.

## CONCLUSION

Applicants respectfully submit that the pending and new claims in this application are in condition for allowance, and respectfully request the allowance of these claims. The Examiner is invited to contact the undersigned attorney at 713.787.1446 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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